CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377

Job No.: CTCE/BBMP/LLR/W.No.04/CSR-05/045c/CEMENT/2016-17

Date: 23.05.2016

TEST REPORT ON CEMENT

* CUSTOMER	:	**Asst. Executive Engineer,** Yelahanka Sub Division, BBMP, Bangalore.
*AGENCY	:	**Mr. L Lokanatha Reddy,** No. 5, 1st H Main Road, 7th B Cross road Kaveri nagara B Block , Kaval Byrasandra, Bangalore.
*NAME OF THE WORK	:	Improvements of Roads and Drains in B sector in Ward No. 04, BBMP, Bangalore.
*REFERENCE	:	BBMP/AEE/YNSD/71/2016-17 Dated : 21.05.2016
SAMPLE ID	:	Cement
SAMPLE RECEIVED ON	:	21.05.2016
PERIOD OF TESTING	:	21.05.2016 to 23.05.2016

The results of the tests conducted on the cement sample are as follows:

Sl. No	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 8112-2013
1	Standard Consistency	IS-4031 (Part -4) 1988(RA-2009)	29.50 %	-
2	a) Initial Setting Time	IS-4031 (Part -5) 1988(RA-2009)	175Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part -5) 1988(RA-2009)	460 Minutes	Not More than 600 Minutes
3	Soundness by Le Chartlier Method	IS-4031 (Part-3) 1988(RA-2009)	1 mm	Not more than 10mm

*Information is furnished by the Customer/Representative.

Note:

⇒ The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒ The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒ Any Query regarding the report must be reported within 30 days from the date of testing.

****

VISHWANATH .C
Quality Manager

Ram Sanjeev AE
23/5

#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377

Job No.: CTCE/BBMP/LLR/W.No.04/CSR-05/045c/SAND-Gradation/2016-17 : 23.05.2016

TEST REPORT ON DETERMINATION GRADATION OF FINE AGGREGATES

*Client : **Asst. Executive Engineer,** Yelahanka Sub Division, BBMP, Bangalore.

*Agency : **Mr. L Lokanatha Reddy,**
No. 5, 1st H Main Road, 7th B Cross road Kaveri nagara B Block , Kaval Byrasandra, Bangalore.

*Name of Work : Improvements of Roads and Drains in B sector in Ward No. 04, BBMP, Bangalore.

*Reference : BBMP/AEE/YNSD/71/2016-17 Dated : 21.05.2016

Technical Reference : IS : 2386 Part 1 - 1963 RA-2007

Sample ID : Fine Aggregates

Sample Received on : 21.05.2016

Date of Testing : 23.05.2016

Total Wt. of Aggregates in gms 1000

Is Sieve Size in mm	Cumulative Weight Passing in %	Specific Limits as per IS 383-1970 (RA- 2007)			
		Zone-I	Zone-II	Zone-III	Zone-IV
10	100	100	100	100	100
4.75	96.50	90-100	90-100	90-100	95-100
2.36	79.50	60-95	75-100	85-100	95-100
1.18	60.40	30-70	55-90	75-100	90-100
600 Micron	32.90	15-34	35-59	60-79	80-100
300 Micron	17.40	5-20	8-30	12-40	15-50
150 Micron	5.10	0-10	0-10	0-10	0-15

* Information is furnished by the Customer/Representative

Remarks : This sample is under Zone-I specific limits.

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

VISHWANATH .C
Quality Manager

#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ic@civiltechconsultants.com / info@civiltechconsultants.com

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377

Job No.: CTCE/BBMP/LLR/W.No.04/CSR-05/047c/AGG/GR/2016-17 : 23.05.2016

TEST REPORT ON DETERMINATION GRADATION OF COARSE AGGREGATES

* Customer	: **Asst. Executive Engineer,** Yelahanka Sub Division, BBMP, Bangalore.
* Agency	: **Mr. L Lokanatha Reddy,** No. 5, 1st H Main Road, 7th B Cross road Kaveri nagara B Block , Kaval Byrasandra, Bangalore.
* Name of Work	: Improvements of Roads and Drains in B sector in Ward No. 04, BBMP, Bangalore.
* Reference	: BBMP/AEE/YNSD/71/2016-17 Dated : 21.05.2016
Technical Reference	: IS : 2386 Part 1 -1963 RA-2007
Sample ID	: Coarse Aggregates (40mm)
Sample Received on	: 21.05.2016
Date of Testing	: 23.05.2016

Total Wt. of Aggregates in gms= **7000**

Is Sieve Size in mm	Cumulative Weight Passing in %	Specific Limits as per IS 383-1970 (RA- 2007)	
		Graded	Single Sized
80	100	100	-
63	100	-	100
40	98.36	95-100	85-100
20	37.56	30-70	0-20
10	19.20	10-35	0-5
4.75	2.81	0-5	-

* Information is furnished by the Customer/Representative

Remarks : This sample is under Graded specific limits.

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

****

Civil-Tech Consultants & Engineers Bangalore

VISHWANATH .C
Quality Manager

#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/LLR/W.No.04/WMM/Gradation/2016-17

01.06.2016

GRADATION FOR WMM
MORTH TABLE-400-11

Customer : **Asst. Executive Engineer,** Yelahanka Sub Division, BBMP, Bangalore.

Agency : **Mr. L Lokanatha Reddy,**
No. 5, 1st H Main Road, 7th B Cross road Kaveri nagara B Block , Kaval Byrasandra, Bangalore.

Name of Work : Improvements of Roads and Drains in B sector in Ward No. 04, BBMP, Bangalore.

Reference : BBMP/AEE/YNSD/71/2016-17 Dated : 21.05.2016

Date of Testing : 01.06.2016

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): 8549

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	175	175	2.0	98.0	95-100
22.4	2512	2687	31.4	68.6	60-80
11.2	1478	4165	48.7	51.3	40-60
4.75	1352	5517	64.5	35.5	25-40
2.36	982	6499	76.0	24.0	15-30
0.600	928	7427	86.9	13.1	8-22
0.075	922	8349	97.7	2.3	0-8

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

Civil-Tech Consultants & Engineers Bangalore

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthiganapathinagara,
Basaveshwaranagar,
Bangalore-560079.

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory
An ISO 9001:2008 Certified Company
NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ
BSCIC
ISO 9001 REGISTERED

Job No.: CTCE/BBMP/LLR/W.No.04/SDBC/Bit/2016-17 10.06.2016

BITUMEN CONTENT DETERMINATION OF SEMI DENSE BITUMINOUS CONCRETE MIX

AS per IRC:SP:-11-1984

CUSTOMER	**Asst. Executive Engineer,** Yelahanka Sub Division, BBMP, Bangalore.
AGENCY	**Mr. L Lokanatha Reddy,** No. 5, 1st H Main Road, 7th B Cross road Kaveri nagara B Block , Kaval Byrasandra, Bangalore.
NAME OF THE WORK	Improvements of Roads and Drains in B sector in Ward No. 04, BBMP, Bangalore.
REFERENCE	BBMP/AEE/YNSD/71/2016-17 Dated : 21.05.2016
SAMPLE I/D	Roads and Drains in B sector in Ward No. 04
DATE OF TESTING	10.06.2016

BITUMEN CONTENT DETERMINATION

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	481	474
3. Weight of Asphalt and Mineral matter Extracted, g	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	19	26.00
7. Bitumen content in %	3.80	5.20
8. Average	4.50	

Note:

- This test report should not be reproduced except in full, without written approval of the laboratory
- The results indicated above are based on the tests carried out on the samples received in the laboratory
- Any Query regarding the report must be reported within 30 days from the date of testing.

****

Ram Sanjeev AE 10/6

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthiganapathinagara,
Basaveshwaranagar,
Bangalore-560079.

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory
An ISO 9001:2008 Certified Company
NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/LLR/W.No.04/SDBC/Bit/2016-17 10.06.2016

BITUMEN CONTENT GRADATION DETERMINATION OF SEMI DENSE BITUMINOUS CONCRETE MIX

As per IS2386 and IRC:SP:11-1984

CUSTOMER	**Asst. Executive Engineer,** Yelahanka Sub Division, BBMP, Bangalore.
AGENCY	**Mr. L Lokanatha Reddy,** No. 5, 1st H Main Road, 7th B Cross road Kaveri nagara B Block , Kaval Byrasandra, Bangalore.
NAME OF THE WORK	Improvements of Roads and Drains in B sector in Ward No. 04, BBMP, Bangalore.
REFERENCE	BBMP/AEE/YNSD/71/2016-17 Dated : 21.05.2016
SAMPLE I/D	Roads and Drains in B sector in Ward No. 04
DATE OF TESTING	10.06.2016

GRADATION AFTER EXTRACTION

Sieve Size in mm	Trail 1				Specified Limits as per MORTH specification table 500-15 (Grading-2)
	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	
13.2	0	0	0	100	100
9.5	20.45	4.25	4.25	95.75	90-100
4.75	250.41	52.06	56.31	43.69	35-51
2.36	52.47	10.91	67.22	32.78	24-39
1.18	47.89	9.96	77.18	22.82	15-30
0.3	32.5	6.76	83.93	16.07	9-19
0.075	55.89	11.62	95.55	4.45	3-8

Sieve Size in mm	Trail 2				Specified Limits as per MORTH specification table 500-15 (Grading-2)
	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	
13.2	0	0	0	100	100
9.5	25.78	5.44	5.44	94.56	90-100
4.75	247.12	52.14	57.57	42.43	35-51
2.36	56.89	12.00	69.58	30.42	24-39
1.18	35.85	7.56	77.14	22.86	15-30
0.3	30.74	6.49	83.62	16.38	9-19
0.075	52.65	11.11	94.73	5.27	3-8

Note:

- This test report should not be reproduced except in full, without written approval of the laboratory.
- The results indicated above are based on the tests carried out on the samples received in the laboratory.
- Any Query regarding the report must be reported within 30 days from the date of testing.

****

M/s. Civil-Tech Consultants & Engineers

#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.